STATEMENT OF BASIS

as required by LAC 33:IX.3109 for LPDES facilities where a fact sheet is not required under LAC 33:IX.3311, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0123676; AI 153967; PER20070001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Burbank and Lee Investors, LLC
Arlington Creek Center
506 Manchester Expressway, Suite B5
Columbus, GA 31904

II. **PREPARED BY:** Angela Marse

DATE PREPARED: April 21, 2008

III. **PERMIT ACTION:** LPDES permit LA0123676, AI 153967; PER20070001

LPDES application received: October 18, 2007

LPDES permit issued: none issued

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving a retail shopping center with restaurants.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located southeast of the intersection of West Lee Drive and Burbank Drive in Baton Rouge, East Baton Rouge Parish.

D. The treatment facility consists of an extended aeration treatment plant and sludge holding tank. Sludge will be disposed offsite at a permitted facility. Disinfection is by chlorination.

E. Outfall 001

Discharge Location:	Latitude	30° 23' 26" North
	Longitude	91° 09' 53" West
Description:	treated sanitary wastewater	
Expected flow:	0.07 MGD	

Please note that if the facility grows to a discharge beyond the design capacity of the facility, additional sewage treatment may be required with prior approval of the facility's plan by the Louisiana Department of Health and Hospitals and notification must be submitted to the LDEQ. Also, if the expected flow reaches or exceeds the design capacity of the facility, a permit modification may be required.

Type of Flow Measurement which the facility is required to have: a measurement device such as a weir system, pump curve, totalizer, or other metering system

V. RECEIVING WATERS:

The discharge is into Arlington Creek in segment 040201 of the Lake Ponchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040201 of the Lake Ponchartrain Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment 040201	**Degree of Support of Each Use**						
Not Supported	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Not Supported	Not Supported	N/A	N/A	N/A	N/A

[1/]The designated uses and degree of support for Segment 040201 of the Lake Ponchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act, as amended by the Water Quality Act of 1987 and EPA's regulations at 40 CFR 130, require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 040201 of the Lake Pontchartrain Basin is on the 2006 Integrated 303(d) List of Impaired Waterbodies. Causes of impairment are ammonia, phosphorus, nitrogen, organic enrichment/low DO, chlorides, sulfates, total dissolved solids, and pathogen indicators. To date no TMDLs have been completed for this waterbody.

Causes of impairments are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Dissolved oxygen

Biochemical oxygen demand (or BOD) is the amount of oxygen required by bacteria to oxidize biologically degradable material (normally organic matter) found in wastewater, effluents, and polluted waters. The test measures the amount of oxygen consumed by a sample by naturally occurring bacteria over a five-day period. Monitoring for biochemical oxygen demand is the best indicator by which to measure the potential discharge of oxygen consuming pollutants at levels that will result in dissolved oxygen below that of state water quality standards. Therefore, to protect against potential discharges resulting in DO levels below that of state water quality standards for the receiving waterbody, $CBOD_5$ limits have been placed in the permit. (Because ammonia nitrogen limits have also been placed in the permit, $CBOD_5$ has been substituted for BOD_5. This inhibits biological activity associated with nitrogen and prevents overestimate of oxygen demand.) In addition to monitoring for $CBOD_5$, dissolved oxygen is also limited in the permit. This is an instantaneous minimum to ensure the discharge will not create or contribute to oxygen levels below State standards in the receiving waterbody.

Ammonia, nitrogen, and phosphorus

Ammonia, nitrogen, and phosphorus are considered nutrients. Nutrients can result in the consumption of dissolved oxygen in the receiving stream making it less available for aquatic life. This Office utilizes ammonia nitrogen as an indicator by which to monitor for the potential presence of nutrients remaining in a waste stream after the treatment process. To protect against the discharge of nutrients into the receiving waterbody at levels which exceed state water quality standards, ammonia nitrogen limits have been placed in the permit.

Pathogen Indicators

Monitoring for fecal coliform is the best indicator for the potential presence of pathogenic organisms in wastewater. To protect against potential receiving water impairments due to pathogens, fecal coliform limits have been established in the permit. Permit limits are reflective of water quality standards for primary contact recreation, a designated use of the receiving stream.

Chlorides, sulfates, and TDS

Chlorides, sulfates, and TDS are suspected causes of impairments. The source of these impairments has been determined to be land development and site clearing. However, sanitary treatment plants can contribute to these impairments as well. Effluent limits were derived for these pollutants to address impairments. Limits are based on the estimated flow of the discharge, the harmonic mean flow of the receiving stream after the mixing zone, and water quality criteria for Bayou Manchac (25mg/l Chlorides, 10 mg/l Sulfates, and 150 mg/l TDS). This is consistent with previously issued individual permits.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040201 is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between LDEQ and the FWS, no further informal (Section7, Endangered Species Act) consultation is required.

VII. HISTORIC SITES:

The discharge will be from a new facility. LDEQ has consulted with the State Historic Preservation Officer (SHPO) in a letter dated October 22, 2007 to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. SHPO's response, dated November 29, 2007 stated that the facility as proposed will have no potential effects.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

OUTFALL 001

The facility is a new discharger into an impaired stream not meeting its designated uses. New or expanding discharges in excess of 100,000 gallons per day should have appropriate effluent limitations that prevent impact on the impaired stream. According to LDEQ's Pre-TMDL Permittting Strategy (December, 2003), this Office will issue permits that 1.) maintain water quality of impaired streams and 2.) include a reopener clause in the permit to allow for more stringent limits if necessary. Maintaining water quality at existing levels means there will not be any additional significant contribution of pollutants to the waterbody. As stated in the letter from Ferguson (EPA) to Region 6 Program Manager dated 1/6/03, a discharger meeting effluent limits of 5mg/l $CBOD_5$, 5 mg/l TSS, 2mg/l ammonia-nitrogen, and 5 mg/l dissolved oxygen would not cause or contribute to existing impairments. Following finalization of the TMDL, the treatment level required by the TMDL could then be implemented. Therefore, a reopener statement has been included in the permit. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
$CBOD_5$	---	5 mg/l	10 mg/l	Best Professional Judgment (BPJ) based on the letter from Ferguson (EPA) to Region 6 Program Managers dated 1/06/03.
TSS	---	5 mg/l	10 mg/l	Best Professional Judgment (BPJ) based on the letter from Ferguson (EPA) to Region 6 Program Managers dated 1/06/03.
Ammonia-Nitrogen	---	2 mg/l	4 mg/l	Best Professional Judgment (BPJ) based on the letter from Ferguson (EPA) to Region 6 Program Managers dated 1/06/03.
Dissolved Oxygen	---	5 mg/l	---	Best Professional Judgment (BPJ) based on the letter from Ferguson (EPA) to Region 6 Program Managers dated 1/06/03.
Chlorides	---	256 mg/l	---	Best Professional Judgment based on receiving stream impairments, LAC33:IX.1115.C.8, and the calculations in Attachment A.